



Executive Summary

This 2021 Local Hazard Mitigation Plan (LHMP) Update serves to update the 2016 Federal Emergency Management Agency (FEMA) approved Placer County LHMP. The purpose of hazard mitigation is to reduce or eliminate long-term risk to people and property from hazards. Placer County, 5 incorporated communities, and 20 special districts prepared this LHMP Update to the FEMA approved 2016 Placer County LHMP, in order to make the County and its residents less vulnerable to future hazard events.

This LHMP Update demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This LHMP Update was also developed, among other things, to ensure Placer County and participating jurisdictions' continued eligibility for certain federal disaster assistance: specifically, the FEMA Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Program (PDM), and the Flood Mitigation Assistance Program (FMA).

Each year in the United States, natural disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. These monies only partially reflect the true cost of disasters, because additional expenses to insurance companies and nongovernmental organizations are not reimbursed by tax dollars. Many natural disasters are predictable, and much of the damage caused by these events can be alleviated or even eliminated. The purpose of hazard mitigation is to reduce or eliminate long-term risk to people and property from hazards.

LHMP Plan Development Process

Hazard mitigation planning is the process through which hazards that threaten communities are identified, likely impacts determined, mitigation goals set, and appropriate mitigation strategies determined, prioritized, and implemented. This LHMP Update documents the hazard mitigation planning process and identifies relevant hazards and vulnerabilities and strategies the County will use to decrease vulnerability and increase resiliency and sustainability in the community.

This is a multi-jurisdictional plan with the following seeking approval of the plan by FEMA:

- Placer County*
- City of Auburn*
- City of Colfax*
- Town of Loomis*
- City of Lincoln*
- City of Rocklin*
- Alta Fire Protection District
- Alpine Springs County Water District*
- Foresthill Fire Protection District*
- Foresthill Public Utility District
- Nevada Irrigation District*
- Newcastle Fire Protection District

- Northstar Community Service District/Fire Department
- North Tahoe Fire Protection District*
- North Tahoe Public Utility District
- Olympic Valley Fire and Public Utility District (was Squaw Valley Fire and Public Utility District)*
- Placer County Flood Control & Water Conservation District*
- Placer County Resource Conservation District
- Placer County Water Agency*
- Placer Hills Fire Protection District (absorbed Loomis FPD, also a participant in the 2016 LHMP)*
- San Juan Water District
- Sierra Joint Community College District
- South Placer Fire Protection District*
- Tahoe City Public Utilities District*
- Truckee Fire Protection District*
- Placer County Air Pollution District

* Participated in 2016 Placer County LHMP

This LHMP Update was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 (Public Law 106-390) and the implementing regulations set forth by the Interim Final Rule published in the Federal Register on February 26, 2002, (44 CFR §201.6) and finalized on October 31, 2007. The County and all participating jurisdictions followed a planning process prescribed by FEMA as detailed in Table ES-1.

Table ES-1 Local Hazard Mitigation Planning Process

DMA Process	Modified CRS Process
1) Organize Resources	
201.6(c)(1)	1) Organize the Planning Effort
201.6(b)(1)	2) Involve the Public
201.6(b)(2) and (3)	3) Coordinate with Other Departments and Agencies
2) Assess Risks	
201.6(c)(2)(i)	4) Identify the Hazards
201.6(c)(2)(ii)	5) Assess the Risks
3) Develop the Mitigation Plan	
201.6(c)(3)(i)	6) Set Goals
201.6(c)(3)(ii)	7) Review Possible Activities
201.6(c)(3)(iii)	8) Draft an Action Plan
4) Implement the Plan and Monitor Progress	
201.6(c)(5)	9) Adopt the Plan
201.6(c)(4)	10) Implement, Evaluate, and Revise the Plan

The planning process began with the organizational phase to establish the Hazard Mitigation Planning Committee (HMPC) comprised of key County representatives, and other local and regional stakeholders; to involve the public; and to coordinate with other departments and agencies. A detailed risk assessment was then conducted followed by the development of a focused mitigation strategy by all participating

jurisdictions or the Placer County Planning Area. Once approved by Cal OES and FEMA, this LHMP Update will be adopted and implemented by the County and all participating jurisdictions over the next five years.

Risk Assessment

The HMPC conducted a risk assessment that identified and profiled hazards that pose a risk to the County and participating jurisdictions, assessed the vulnerability of the Placer County Planning Area to these hazards, and examined the existing capabilities to mitigate them.

The Placer County Planning Area is vulnerable to numerous hazards that are identified, profiled, and analyzed in this Plan. Floods, earthquakes, drought, levee failures, landslides, wildfires, and other severe weather events are among the hazards that can have a significant impact on the County. Table ES-2 details the hazards identified for this Placer County LHMP Update.

Table ES-2 Placer County Hazard Identification Assessment

Hazard	Geographic Extent	Likelihood of Future Occurrences	Magnitude/Severity	Significance	Climate Change Influence
Agricultural Hazards	Significant	Highly Likely	Critical	Medium	Medium
Avalanche	Limited	Likely	Limited	Medium	Medium
Climate Change	Extensive	Likely	Limited	Medium	–
Dam Failure	Significant	Occasional	Critical	High	Medium
Drought & Water Shortage	Extensive	Likely	Critical	High	High
Earthquake	Significant	Occasional	Critical	Medium	Low
Floods: 1%/0.2% annual chance	Limited	Occasional	Critical	High	Medium
Floods: Localized Stormwater	Limited	Occasional/Highly Likely	Limited	Medium	Medium
Landslides, Mudslides, and Debris Flows	Limited	Occasional	Limited	Low	Medium
Levee Failure	Limited	Unlikely	Limited	Low	Medium
Pandemic	Extensive	Likely	Catastrophic	Medium	Medium
Seiche	Limited	Unlikely	Limited	High	Medium
Severe Weather: Extreme Heat	Extensive	Highly Likely	Limited	Medium	High
Severe Weather: Freeze and Snow	Extensive	Highly Likely	Critical	Medium	Medium
Severe Weather: Heavy Rains and Storms	Extensive	Occasional	Limited	Medium	Medium
Severe Weather: High Winds and Tornadoes	Extensive	Highly Likely	Critical	High	Low
Tree Mortality	Extensive	Likely	Limited	High	High
Wildfire	Extensive	Highly Likely	Critical	High	High
<p>Geographic Extent Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area</p> <p>Likelihood of Future Occurrences Highly Likely: Near 100% chance of occurrence in next year, or happens every year. Likely: Between 10 and 100% chance of occurrence in next year, or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year, or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years, or has a recurrence interval of greater than every 100 years.</p> <p>Magnitude/Severity Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid</p> <p>Significance Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact</p> <p>Climate Change Influence Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact</p>					

Mitigation Strategy

Based on the results of the risk assessment, the participating jurisdictions and the HMPC developed a mitigation strategy for reducing the County's and all participating jurisdictions' risk and vulnerability to hazards. The resulting Mitigation Strategy for the Placer County Planning Area is comprised of LHMP goals and objectives and a mitigation action plan which includes a series of mitigation action projects and implementation measures. Based on the risk assessment, the HMPC identified goals and objectives for reducing the Placer County Planning Area's vulnerability to hazards. The goals and objectives of this multi-hazard mitigation plan are:

Goal 1: Minimize risk and vulnerability of Placer County to the impacts of natural hazards and protect lives and reduce damages and losses to property, economy, public health and safety, and the environment

- Minimize loss of life and injury and protect public health and safety of all Placer County residents and visitors, including at-risk populations
- Minimize economic and resource impacts and promote long-term viability and sustainability of County resources
- Minimize impacts to both existing and future development from all hazards
- Minimize impacts to natural and cultural resources
- Minimize impacts to watersheds/promote watershed health

Goal 2: Provide protection for critical facilities, infrastructure, utilities and services from hazard impacts.

- Harden critical facilities, infrastructure, and utilities; create redundancy and reliability to prevent or minimize loss and facilitate recovery
- Design and/or retrofit critical facilities, infrastructure, and utilities necessary for continuity of government to allow them to remain operational during and following a disaster
- Minimize impacts of extended power outages

Goal 3: Improve public awareness, education, communication, and preparedness for all hazards.

- Enhance public outreach, education, and preparedness program to include all hazards of concern
- Increase public knowledge of the risk and vulnerability to identified hazards and their recommended responses to disaster events to reduce losses
- Utilize multiple public outreach avenues and modern communication platforms, such as new technologies, social media, and others
- Provide information and alerts about potential, developing, and ongoing emergency situations through extensive alert and warning systems that convey information to all residents, in multiple languages and formats to ensure it is widely accessible
- Educate public on evacuation planning and sheltering options for all hazard types and to encompass all groups (e.g., residents, visitors, second homeowners, vulnerable populations, animals)
- Increase community awareness and participation in hazard mitigation activities

Goal 4: Increase communities' capabilities to mitigate losses and to be prepared for, respond to, and recover from a disaster event

- Continued enhancements to Emergency Services capabilities integrating new technologies to reduce losses and save lives
- Improve interagency (local, state, federal) emergency coordination, planning, training, exercising, and communication to ensure effective community preparedness, response and recovery
- Improve interagency coordination with respect to implementation of mitigation activities including multi-jurisdictional efforts
- Enhance the use of shared resources/Develop a strong mutual aid support system
- Maintain current service levels, at a minimum
- Develop funding mechanisms to enhance emergency services for additional staffing and enhanced services
- Increase first responders' awareness of vulnerable populations and other priority needs during a hazard event; (use of enhanced technology to pre-identify and communicate)
- Utilize lessons learned (debriefing) to improve response capabilities
- Promote efficient recovery from incidents to minimize impacts to lives, environment, and economy

Goal 5: Ensure a more resilient County that can adapt to the hazards created or exacerbated by Climate Change

- Integrate the results and adaptive policies of the Climate Vulnerability Assessment (prepared under the Placer County Sustainability Plan) into the implementation of the Local Hazard Mitigation Plan
- Reduce the County's greenhouse gas (GHG) emissions as specified in the Placer County Sustainability Plan in order to reduce the hazards exacerbated by climate change
- Consider climate change adaptation strategies in flood and inundation hazard planning
- Consider climate change adaptation strategies in planning for very high fire hazard severity zones
- Protect groundwater and reduce the impacts from drought and climate change

Goal 6: Reduce fire severity and mitigate undesirable fire outcomes in Placer County

- Reduce life safety issues, property loss, and damages associated with wildfires
- Prevent and reduce wildfire ignitions and wildfire-related losses
- Restore and maintain fire resilient landscapes on both public and private lands
- Create fire adaptive communities by facilitating interagency cooperation and communication and support between agencies and the public
- Mitigate undesirable fire outcomes for the environment, watersheds, and quality of life

Goal 7: Maintain FEMA Eligibility/Position the communities for grant funding

- Maintain requirement of updating LHMP every 5 years
- Continue to increase number of participating jurisdictions in future LHMP Updates to provide eligibility for FEMA pre- and post-mitigation funding and eligibility for other related funding sources
- Continued compliance with the NFIP/enhancement of floodplain management program through participation in the NFIP's Community Rating System (CRS) where feasible

Actions to support these goals are shown on Table ES-3.

Table ES-3 Placer County Planning Area Mitigation Actions

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Placer County						
Multi-Hazard Actions						
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	Unincorporated Placer County	2016 Action	X	X		
Action 2. Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	Unincorporated Placer County	New Action	X	X		
Action 3. Critical Facility Infrastructure Improvements	Unincorporated Placer County	New Action	X	X		
Action 4. Protect Sewer Infrastructure and Utilities	Unincorporated Placer County	New Action	X	X		
Action 5. Trail System Way Finding and Directional Signage	Unincorporated Placer County	2016 Action	X	X		
Agricultural Hazard Actions						
Action 6.						
Avalanche Actions						
Action 7.						
Climate Change Actions						
Action 8. Green Waste	Unincorporated Placer County	New Action	X	X		
Action 9. Reduce Organic Waste Disposal	Unincorporated Placer County	New Action	X	X		
Dam Failure, Flood: 1%, 0.5%, 0.2% annual chance, Flood: Localized Flood, and Severe Weather: Heavy Rains and Storms Actions						
Action 10. Elevate Repetitive Loss Structures in 100-year Floodplain	Unincorporated Placer County	2016 Action	X	X		
Action 11. Elevate Remaining 95 Homes in the Dry Creek Watershed	Unincorporated Placer County	2016 Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 12. Community Rating System (CRS) Maintain and Enhance	Unincorporated Placer County	2016 Action	X	X		
Action 13. Bridge and Culvert replacement and drainage improvements	Unincorporated Placer County	2016 Action	X	X		
Drought & Water Shortage, Severe Weather: Extreme Heat, Tree Mortality, and Wildfire Actions						
Action 14. Improve and Protect Water Systems	Unincorporated Placer County	New Action	X	X		
Action 15. Groundwater Sustainability Planning	Unincorporated Placer County	New Action	X	X		
Action 16. Fuel Breaks - Wildland Urban Interface (WUI)	Unincorporated Placer County	New Action	X	X		
Action 17. Public Education & Awareness	Unincorporated Placer County	New Action	X	X		
Action 18. Fuel Break - Large Strategic	Unincorporated Placer County	New Action	X	X		
Action 19. Natural Systems Protection / Education and Awareness Programs - Placer County Wildland Urban Interface (WUI) Strategic Planning	Unincorporated Placer County	New Action	X	X		
Action 20. Fuel Break - North Fork of American River	Unincorporated Placer County	New Action	X	X		
Action 21. Fuel Break - North Fork of American River	Unincorporated Placer County	New Action	X	X		
Action 22. Defensible Space Programs	Unincorporated Placer County	New Action	X	X		
Earthquake Actions						
Action 23.						
Pandemic Actions						
Action 24.						
Seiche Actions						
Action 25.						

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Severe Weather: Freeze and Snow and High Wind and Tornado Actions						
Action 26.						
City of Auburn						
Action 1. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	City of Auburn	2016 Action	X	X		
Action 2. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	City of Auburn	New Action	X	X		
NEED ACTIONS						
City of Colfax						
Action 1. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	City of Colfax	2016 Action	X	X		
Action 2. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	City of Colfax	New Action	X	X		
Action 3. Continue Annual Weed Abatement Ordinance	City of Colfax	2016 Action	X	X		
Action 4. Colfax Schools Evacuation Site Shaded Fuel Break	City of Colfax	2016 Action	X	X		
Action 5. Evaluate the Need and Feasibility of Improving Fire Prevention for the Historic Business District	City of Colfax	2016 Action	X	X		
City of Lincoln						
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	City of Lincoln	2016 Action	X	X		
Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	City of Lincoln	New Action	X	X	X	
Action 3. Lincoln Boulevard: Auburn Ravine Bridge – Reconstruct Bridge	City of Lincoln	2016 Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 4. McBean Park Drive: Auburn Ravine Bridge – Additional 110' Span	City of Lincoln	2016 Action	X	X	X	
Action 5. Lakeview Farms Regional Volumetric Mitigation Facility	City of Lincoln	2016 Action	X	X	X	
Action 6. Gladding Parkway, Lincoln Boulevard, McCourtney Road – Stream Restoration And Culvert Improvement	City of Lincoln	2016 Action	X	X	X	
Action 7. "O" Street Drainage Improvements	City of Lincoln	2016 Action	X	X	X	
Action 8. 7th Street Drainage Improvements	City of Lincoln	2016 Action	X	X	X	
Action 9. Auburn Ravine at State Route 193 Bridge	City of Lincoln	2016 Action	X	X	X	
Action 10. Auburn Ravine at State Route 65 Bridge	City of Lincoln	2016 Action	X	X	X	
Action 11. Ingram Slough – Orchard Creek Return Channel	City of Lincoln	2016 Action	X	X	X	
Action 12. Markham Ravine – Updated FEMA Analysis And Mapping	City of Lincoln	2016 Action	X	X	X	
Action 13. Markham Ravine Drainage Improvements – Union Pacific Railroad & State Route 65 Crossings	City of Lincoln	2016 Action	X	X	X	
Action 14. Auburn Ravine Stream Restoration Projects (Analysis and Repairs)	City of Lincoln	2016 Action	X	X	X	
Action 15. Markham Ravine Streambed Restoration Projects (Analysis Only)	City of Lincoln	2016 Action	X	X	X	
Action 16. Coon Creek Streambed Restoration Projects (Analysis Only)	City of Lincoln	2016 Action	X	X	X	
Action 17. Fire Prevention and Fuels Management Plan	City of Lincoln	2016 Action	X	X		
Town of Loomis						
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	Town of Loomis	2016 Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	Town of Loomis	New Action	X	X		
NEED ACTIONS						
City of Rocklin						
Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan	City of Rocklin	2016 Action	X	X		
Action 2. Enhance Public Education and Awareness of Natural Hazards and Public Understanding of Disaster Preparedness	City of Rocklin	New Action	X	X		
Action 3. Open Space Fire Prevention and Vegetation Management Prescribed Grazing	City of Rocklin	2016 Action	X	X		
Action 4. Creek Channel and Draining Way Clearing and Maintenance	City of Rocklin	2016 Action	X	X	X	
Action 5. GIS Based Mapping of Pertinent Information that can be used by All Agencies in the Development of Plans and During Emergency Incidents	City of Rocklin	2016 Action	X	X		
Alta Fire Protection District						
Action 1. Reflective Addressing	AFPD and unincorporated Placer County	2016 Action	X	X		
Action 2. Alta FireWise Community Established and Continuing	AFPD and unincorporated Placer County	2016 Action	X	X		
Action 3. Apparatus Water Fill & Drafting Location Improvements	AFPD and unincorporated Placer County	2016 Action	X	X		
Action 4. Emergency Communications and Information System Improvements (HAM Radio and GMRS communications)	AFPD and unincorporated Placer County	2016 Action	X	X		
Action 5. Evacuation / Reunification Center Improvements	AFPD and unincorporated Placer County	2016 Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 6. Home Hardening Education and Projects	AFPD and unincorporated Placer County	2016 Action	X	X		
Action 7. Natural Systems Protection / Education and Awareness Programs and Community Fuel Breaks	AFPD and unincorporated Placer County	2016 Action	X	X		
Action 8. Natural Systems Protection / Education and Awareness Programs	AFPD and unincorporated Placer County	2016 Action	X	X		
Alpine Springs County Water District						
Action 1. Fire Fuels Mitigation	ASCWD and unincorporated Placer County	New Action	X	X		
NEED ACTIONS						
Foresthill Fire Protection District						
Action 1. Chipper Program for Foresthill FPD	FFPD and unincorporated Placer County	New Action	X	X		
Nevada Irrigation District						
Action 1. 2015 Agricultural Water Management Plan – Updated 2021	NID and unincorporated Placer County	New Action	X	X		
Action 2. Avalanche Mitigation	NID and unincorporated Placer County	New Action	X	X		
Action 3. Canal Culvert Replacement Program	NID and unincorporated Placer County	2016 Action	X	X		
Action 4. Centennial Water Supply Project	NID and unincorporated Placer County	2016 Action	X	X		
Action 5. Combie Phase 1 Replacement	NID and unincorporated Placer County	2016 Action	X	X		
Action 6. Continuity of Operations Plan	NID and unincorporated Placer County	New Action	X	X		
Action 7. Pandemic Planning	NID and unincorporated Placer County	New Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 8. Dam Failure Mitigation	NID and unincorporated Placer County	New Action	X	X		
Action 9. Water Conservation and Drought Preparedness	NID and unincorporated Placer County	New Action	X	X		
Action 10. Drought Contingency Plan	NID and unincorporated Placer County	New Action	X	X		
Action 11. Flood Mitigation	NID and unincorporated Placer County	New Action	X	X		
Action 12. Healthy Forest Management and Wildfire Mitigation Plan	NID and unincorporated Placer County	New Action	X	X		
Action 13. Forest Resilience Program	NID and unincorporated Placer County	New Action	X	X		
Action 14. Injury and Illness Prevention Program	NID and unincorporated Placer County	New Action	X	X		
Action 15. Public Safety Plan (FERC)	NID and unincorporated Placer County	New Action	X	X		
Action 16. North Auburn Treatment Plant VFD's and Permanent Backup Generator	NID and unincorporated Placer County	New Action	X	X		
Action 17. Orr Creek Diversion	NID and unincorporated Placer County	2016 Action	X	X		
Action 18. Owner's Dam Safety Program, Revision 3.0	NID and unincorporated Placer County	New Action	X	X		
Action 19. Raw Water Master Plan	NID and unincorporated Placer County	New Action	X	X		
Action 20. Raw Water Replacement Program	NID and unincorporated Placer County	New Action	X	X		
Action 21. Reservoir Cleaning	NID and unincorporated Placer County	2016 Action	X	X		
Action 22. Resilient Headwaters Forests	NID and unincorporated Placer County	New Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 23. Tree Mortality Mitigation	NID and unincorporated Placer County	New Action	X	X		
Action 24. 2015 Urban Water Management Plan – Updated 2021	NID and unincorporated Placer County	New Action	X	X		
Action 25. Vegetation Management Plan (Hydroelectric Facilities)	NID and unincorporated Placer County	New Action	X	X		
Action 26. Water Planning Projections	NID and unincorporated Placer County	New Action	X	X		
Action 27. Water Service Auburn Valley CSD	NID and unincorporated Placer County	2016 Action	X	X		
Action 28. Forest Resilience and Wildfire Risk Reduction	NID and unincorporated Placer County	New Action	X	X		
Newcastle Fire Protection District						
Action 1.Private roadway and driveway vegetation clearances.	NFPD and unincorporated Placer County	New action	X	X		
Action 2.Address signage for residential and commercial structures.	NFPD and unincorporated Placer County	New action	X	X		
Action 3.Provide Advanced Life Support (ALS) services utilizing paramedics on the engine company.	NFPD and unincorporated Placer County	New action	X	X		
Action 4.Defensible space inspection and implementation throughout the District.	NFPD and unincorporated Placer County	New action	X	X		
Action 5.Relocate and construct a new fire station for the Newcastle Fire Protection District.	NFPD and unincorporated Placer County	New action	X	X		
Action 6.Participate and collaborate with the Greater Auburn Area Fire Safe Council (GAAFSC) and contribute to the Community Wildfire Protection Plan (CWPP)	NFPD and unincorporated Placer County	New action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 7. Heavy Rains, Localized Flooding, Flood, Freeze, and Snow Mitigation	NFPD and unincorporated Placer County	New action	X	X		
Northstar Community Services District and Fire Department						
Action 1.Tree Mortality	NCSD & FD and unincorporated Placer County	New action	X	X		
Action 2.Wildfire Mitigation	NCSD & FD and unincorporated Placer County	New action	X	X		
Action 3.Critical Power Interruption Emergency Response Plan	NCSD & FD and unincorporated Placer County	New action	X	X		
Action 4.Emergency Action Plan – Reservoir A Dam	NCSD & FD and unincorporated Placer County	New action	X	X		
North Tahoe Fire Protection District						
Action 1. Avalanche: Risk Reduction, Response Plan, and Pre-Incident Training	NTFPD and unincorporated Placer County	New action	X	X		
Action 2. Communications: Upgrades, Development, Maintenance, and Enhancement of Interoperability Radio Systems	NTFPD and unincorporated Placer County	2016 Action	X	X		
Action 3. Community Wildfire Prevention Plan Implementation: Forest Management, Fuels Reduction, Defensible Space, Home Hardening, Curbside Chipping, Greenwaste Disposal, Tree Marking, Fire Adapted and Firewise Communities, Outreach & Education	NTFPD and unincorporated Placer County	New action	X	X		
Action 4. GIS Technology, Equipment, Database and Mapping Improvements	NTFPD and unincorporated Placer County	2016 Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 5. Pandemic Preparedness and Response Plan	NTPFD and unincorporated Placer County	New action	X	X		
Action 6. Tahoe Emergency Notifications System (TENS)	NTPFD and unincorporated Placer County	New action	X	X		
Action 7. Water for Fire Suppression Collaborative	NTPFD and unincorporated Placer County	New action	X	X		
North Tahoe Public Utility District						
Action 1.Backup Generator Installation at Critical Facilities	NTPUD and unincorporated Placer County	New action	X	X		
Action 2.Fuels Reduction around Critical Infrastructure and Access Roads, and within the North Tahoe Regional Park	NTPUD and unincorporated Placer County	2016 Action	X	X		
Action 3.Increased Capacity and Reliability for Dollar Cove Water System	NTPUD and unincorporated Placer County	New action	X	X		
Action 4.Cybersecurity Assessment and Improvements	NTPUD and unincorporated Placer County	New action	X	X		
Action 5.Seismic Analysis and Retrofit of Critical Infrastructure	NTPUD and unincorporated Placer County	2016 Action	X	X		
Action 6.Sewer Main Replacements in Shorezone of Lake Tahoe	NTPUD and unincorporated Placer County	2016 Action	X	X		
Action 7.Water Booster Pump Station Rehabilitation/Replacement	NTPUD and unincorporated Placer County	2016 Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 8. Water System Interties	NTPUD and unincorporated Placer County	2016 Action	X	X		
Olympic Valley Fire Department/Olympic Valley Public Service District						
Action 1. Community-Wide Emergency Notification System	OVFD/OVPSD and unincorporated Placer County	2016 Action	X	X		
Action 2. Emergency Water Supply Interconnection to Martis Valley	OVFD/OVPSD and unincorporated Placer County	2016 Action	X	X		
Action 3. OVPSD/Mutual Water Company Intertie	OVFD/OVPSD and unincorporated Placer County	2016 Action	X	X		
Action 4. Squaw Creek Siphon	OVFD/OVPSD and unincorporated Placer County	2016 Action	X	X		
Action 5. Water Tank Earthquake Retrofit Projects	OVFD/OVPSD and unincorporated Placer County	2016 Action	X	X		
Action 6. Easement Abatement/Maintenance of Emergency Access	OVFD/OVPSD and unincorporated Placer County	2016 Action	X	X		
Action 7. Towable Generator for Powering Booster Stations	OVFD/OVPSD and unincorporated Placer County	New Action	X	X		
Action 8. Emergency Water Supply Interconnection to Martis Valley	OVFD/OVPSD and unincorporated Placer County	New Action	X	X		
Action 9. Emergency Water Supply Interconnection to Martis Valley	OVFD/OVPSD and unincorporated Placer County	New Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Placer County Flood Control District						
Action 1.FEMA CTP DFIRM Mapping Study	PCFCD and unincorporated Placer County	2016 Action	X	X	X	
Action 2.Pursue Regional Detention and Retention Projects within the Dry Creek and Cross Canal Watersheds	PCFCD and unincorporated Placer County	2016 Action	X	X	X	
Action 3.Update the Flood Control Plan for the Cross Canal Watershed	PCFCD and unincorporated Placer County	2016 Action	X	X	X	
Action 4.Upgrade Flood Warning System to ALERT 2, Add Additional Gage Locations and Flood Forecasting Capabilities	PCFCD and unincorporated Placer County	2016 Action	X	X	X	
Placer County Resource Conservation District						
Action 1. Fuel Breaks - Wildland Urban Interface (WUI)	PCRCDD and unincorporated Placer County	New Action	X	X		
Action 2. Fuel Break - Large Strategic	PCRCDD and unincorporated Placer County	New Action	X	X		
Action 3. Defensible Space Programs (Placer County Chipper Program)	PCRCDD and unincorporated Placer County	New Action	X	X		
Action 4. Landowner Technical Assistance (Healthy Soils/ Carbon Farm Management Program)	PCRCDD and unincorporated Placer County	New Action	X	X		
Placer County Water Agency						
Action 1. Develop Operable Dam Spillway Gates at Hell Hole Reservoir	PCWA and unincorporated Placer County	New Action	X	X	X	

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 2. Alternate Intake for Alta Water Treatment Plant	PCWA and unincorporated Placer County	New Action	X	X	X	
Action 3. Canal Access for Fire Fighting and water source	PCWA and unincorporated Placer County	New Action	X	X		
Action 4. Back-up and Stand-By Power Generation for critical community drinking and fire suppression water supply.	PCWA and unincorporated Placer County	New Action	X	X	X	
Action 5. Lake Arthur Pumping Station	PCWA and unincorporated Placer County	New Action	X	X	X	
Action 6. Monte Vista Spill Improvements and Cedar Creek Canal Encasement in Pipe	PCWA and unincorporated Placer County	New Action	X	X	X	
Action 7. Pulp Mill Canal Pipeline Encasement	PCWA and unincorporated Placer County	New Action	X	X		
Action 8. Permanent Pumps in Rock Creek Reservoir (PG&E Reservoir)	PCWA and unincorporated Placer County	New Action	X	X		
Action 9. Vegetation Management at PCWA Wooden Flumes	PCWA and unincorporated Placer County	2016 Action	X	X		
Action 10. Enhance Canals by Converting Earthen Canals to Gunite-Lined Canals in Critical Areas.	PCWA and unincorporated Placer County	2016 Action	X	X		
Action 11. Wildfire prevention or Wildfire firefighting enhancements.	PCWA and unincorporated Placer County	New Action	X	X		
Action 12. Replace Wooden Flume Structures	PCWA and unincorporated Placer County	2016 Action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 13. Reservoir - dam capacity and water management improvement projects. (was De-Silt Reservoirs)	PCWA and unincorporated Placer County	2016 Action	X	X	X	
Action 14. Rockfall anchoring, stabilization, rockfall netting and slide debris mitigation. (was Hillside Slope Stabilization)	PCWA and unincorporated Placer County	2016 Action	X	X		
Action 15. Zone 3 Automation	PCWA and unincorporated Placer County	New Action	X	X	X	
Action 16. Pumps at Halsey Forebay	PCWA and unincorporated Placer County	New Action	X	X		
Action 17. Backup Electrical Generation at American River and Ophir Road Pump Stations	PCWA and unincorporated Placer County	New Action	X	X		
Action 18. Sierra Forest Restoration Partnerships	PCWA and unincorporated Placer County	New Action	X	X		
Placer Hills Fire Protection District						
Action 1. Address signage for residential and commercial structures.	PHFPD and unincorporated Placer County	New action	X	X		
Action 2. Defensible space inspection and implementation throughout the District.	PHFPD and unincorporated Placer County	New action	X	X		
Action 3. Private roadway and driveway vegetation clearances.	PHFPD and unincorporated Placer County	New action	X	X		
Action 4. Participate and collaborate with the Placer Sierra Fire Safe Council (PSFSC) and contribute to the Community Wildfire Protection Plan (CWPP)	PHFPD and unincorporated Placer County	New action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 5. Heavy Rains, Localized Flooding, Flood, Freeze, and Snow Mitigation	PHFPD and unincorporated Placer County	New action	X	X		
San Juan Water District						
Action 1.Updating the 2015 Urban Water Management Plan	SJWD and unincorporated Placer County	New action	X	X		
Action 2.Dam Failure Mitigation	SJWD and unincorporated Placer County	New action	X	X		
Action 3.Earthquake Mitigation	SJWD and unincorporated Placer County	New action	X	X		
Sierra Joint Community College District						
Action 1. Campus safety: fire, earthquake, active shooter, power outage, health emergencies, and pandemics.	SJCCD and unincorporated Placer County	New action	X	X		
South Placer Fire Protection District						
Action 1. Vegetation Management in Open Space Areas	SPFPD and unincorporated Placer County	2016 Action	X	X		
Action 2. Shaded Fuel Break along west shore of Folsom Lake - Granite Bay	SPFPD and unincorporated Placer County	New action	X	X		
Action 3. Backup Generator Installation for Fire Stations	SPFPD and unincorporated Placer County	New action	X	X		
Tahoe City Public Utility District						
Action 1. West Shore Storage Augmentation Project	TCPUD and unincorporated Placer County	New action	X	X		
Action 2. Tahoe Cedars Water System Interconnection and Distribution Project	TCPUD and unincorporated Placer County	New action	X	X		

Action Title	Jurisdictions Benefitting from Action (s)	New Action/ 2016 Action	Address Current Development	Address Future Development	Continued NFIP Compliance	Mitigation Type
Action 3. Madden Creek Water System Interconnection and Distribution Project	TCPUD and unincorporated Placer County	New action	X	X		
Action 4. West Lake Tahoe Regional Water Treatment Plant	TCPUD and unincorporated Placer County	2016 Action	X	X		
Truckee Fire Protection District						
NEED ACTIONS						
Placer County Air Pollution Control District						
Action 1. Wildfire Smoke Impact Response – Public Education & Outreach	PCAPCD and unincorporated Placer County	New action	X	X		
Action 2. Local Air Quality Sensors to provide instantaneous public information on local PM concentrations due to wildfire smoke.	PCAPCD and unincorporated Placer County	New action	X	X		
Action 3. Wildfire Smoke Impact Response – Clean Air Centers for Vulnerable Populations	PCAPCD and unincorporated Placer County	New action	X	X		



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Annexes

Annex A: City of Auburn

Annex B: City of Colfax

Annex C: Town of Loomis

Annex D: City of Lincoln

Annex E: City of Rocklin

Annex F: Alta Fire Protection District

Annex G: Alpine Springs County Water District

Annex H: Foresthill Fire Protection District

Annex I: Foresthill Public Utility District

Annex J: Nevada Irrigation District

Annex K: Newcastle Fire Protection District

Annex L: Northstar Community Service District/Fire Department

Annex M: North Tahoe Fire Protection District

Annex N: North Tahoe Public Utility District

Annex O: Olympic Valley Fire and Public Utility District (was Squaw Valley Fire and Public Utility District)

Annex P: Placer County Flood Control & Water Conservation District

Annex Q: Placer County Resource Conservation District

Annex R: Placer County Water Agency

Annex S: Placer Hills Fire Protection District (absorbed Loomis FPD, also a participant in the 2016 LHMP)

Annex T: San Juan Water District

Annex U: Sierra Joint Community College District

Annex V: South Placer Fire Protection District

Annex W: Tahoe City Public Utilities District

Annex X: Truckee Fire Protection District

Annex Y: Placer County Air Pollution District

Appendices

Appendix A: Planning Process

Appendix B: References

Appendix C: Mitigation Strategy

Appendix D: Adoption Resolution

Appendix E: Threatened and Endangered Species

Appendix F: Critical Facilities

Appendix G: Fire History

Abbreviations and Acronyms **FINAL UPDATE AT END**

Acronym	Definition
AB	Assembly Bill
ACS	American Community Survey
APG	Adaptation Planning Guide
APN	Assessor Parcel Numbers
AQI	Air Quality Index
BAM	Best Available Map
BCEGS	Building Code Effectiveness Grading Schedule
BLM	Bureau of Land Management
BRACE	Building Resilience Against Climate Effects
BRIC	Building Resilient Infrastructure and Communities
CAC	Community Assistance Contact
CAISO	California Independent System Operator
CBC	California Building Code
Cal DWR	California Department of Water Resources
Cal OES	California Office of Emergency Services
CAS	Climate Adaptation Strategy
CAV	Community Assistance Visit
CCHPR	Climate Change and Health Profile Report
CCSM3	Community Climate System Model Version 3
CDAA	California Disaster Assistance Act
CDC SVI	Center for Disease Control Social Vulnerability Index
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Health
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGS	California Geological Survey
CNNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNRA	California Natural Resource Agency
CPUC	California Public Utilities Commission
CRS	Community Rating System
CRV	Contents Replacement Values
CVP	Central Valley Project

Acronym	Definition
DAC	Disadvantaged Community Status
DFIRM	Digital Flood Insurance Rate Map
DMA	Disaster Mitigation Act
DSOD	Division of Safety of Dams
EF	Enhanced Fujita
EOP	Emergency Operations Plan
ESF	Emergency Support Function
F	Fujita
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHSZ	Fire Hazard Severity Zones
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FMA	Flood Mitigation Assistance
FMMP	Farmland Mapping and Monitoring Program
FRA	Federal Responsibility Area
FRAP	Fire and Resource Assessment Program
GFDL	Geophysical Fluid Dynamics Laboratory
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GRASP	Geospatial Research, Analysis & Services Program
HMGP	Hazard Mitigation Grant Program
HMPC	Hazard Mitigation Planning Committee
IBC	International Building Code
ICC	Increased Cost of Compliance
IPCC	Intergovernmental Panel on Climate Change
IRC	International Residential Code
IRWM	Integrated Regional Water Management
LAFCO	Local Agency Formation Commission
LOMA	Letter of Map Amendment
LOMR	Letter of Map Revision
LHMP	Local Hazard Mitigation Plan
LRA	Local Responsibility Area
MERS	Middle East Respiratory Syndrome
MHDP	Multi-Hazards Demonstration Project
MHI	Median Household Income
MMI	Modified Mercalli Intensity

Acronym	Definition
MPH	Miles Per Hour
MSL	Mean Sea Level
MW	Megawatts
NBHCP	Natomas Basin Habitat Conservation Plan
NCDC	National Climactic Data Center
NDMC	National Drought Mitigation Center
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NIDIS	National Integrated Drought Information System
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NWS	National Weather Service
OES	Placer County Office of Emergency Services
OHP	Office of Historic Preservation
PA	Public Assistance
PDM	Pre-Disaster Mitigation
PG&E	Pacific Gas and Electric
PM	Particulate Matter
PNAS	Proceedings of the National Academy of Sciences
PSPS	Public Safety Power Shutoff
RCP	Representative Concentration Pathways
RL	Repetitive Loss
SAC-SJ	Sacramento-San Joaquin
SB	Senate Bill
SBA	Small Business Administration
SDAC	Severely Disadvantaged Community
SFHA	Special Flood Hazard Area
SGMA	Sustainable Groundwater Management Act
SH	State Highway
SR	State Route
SRA	State Responsibility Area
SRL	Severe Repetitive Loss
SWP	State Water Project
UBC	Uniform Building Code
UCERF	Uniform California Earthquake Rupture Forecast
ULOP	Urban Level of Flood Protection
URM	Unreinforced masonry

Acronym	Definition
USACE	US Army Corps of Engineers
USDA	US Department of Agriculture
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
WHO	World Health Organization
WSOC	Wildfire Safety Operations Center
WRCC	Western Regional Climate Center
WUI	Wildland Urban Interface